IN THE CLAIMS

1. (Currently Amended) A method of evaluating data which has been scanned to create an image which is stored in a memory represented as an array having at least two dimensions, comprising:

(a) defining a subset of the array as a portion of the image having at least first and second dimensions;

(b) deriving a value for the defined subset of the array;

(c) ~~incrementing the subset along at least one dimension~~ moving a position of the subset in at least one direction without increasing the overall dimensions of the subset;

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(d) deriving a value for the ~~incremented~~ moved subset of the array; and

(e) repeating steps (c) and (d) to obtain derived values for additional subsets of the image.

2. (Currently Amended) The method according to Claim 1, wherein the step of ~~incrementing~~ moving is along a single ~~dimension~~ direction.

3. (Original) the method according to Claim 1, wherein the derived values for each subset of the scanned image are stored in a computer memory.

4. (Original) The method according to Claim 1, including the steps of

creating a look-up table for calibrating the scanned image to a standard, and substituting the value in the look-up table for the derived values.

5. (Original) The method according to Claim 1, wherein each portion of the array represents the gray level of the corresponding portion of the image.

6. (Original) The method according to Claim 1, wherein the step of deriving includes taking the mathematical average of the gray level for each portion of the array in the subset.

7. (Original) The method according to Claim 1, wherein the data has been scanned using a scanner selected from the group consisting of (a) flatbed scanners, (b) scanners where the data

moves along a generally straight path, and (c) scanners where the data moves along a curved path.

8. (Original) The method according to Claim 1, wherein the data represents a sample which has been subjected to electrophoresis.

9. (Original) The method according to Claim 1, wherein the subset of the array has a first dimension which is at least five times greater than the second dimension.

10. (Original) The method according to Claim 1, including the steps of

creating a look-up table for calibrating the scanned image to a standard, and substituting the value in the look-up table for the derived values, wherein the standard is a neutral density optical calibrator.

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11. (Original) The invention according to Claim 1, wherein the scanned image is converted into a plurality of data points defining a curve.

12. (Original) The invention according to Claim 11, wherein the area under the curve is determined by integration.

13. (Currently Amended) A method of virtual scanning of an image stored as data in a memory, the data represented as an array having at least two dimensions, wherein each element of the array is defined as a pixel, comprising:

(a) defining a subset of the array as a number of pixels oriented in at least first and second dimensions;

(b) deriving a value for the optical density of the pixels in the defined subset of the array;

(c) ~~incrementing the subset along at least one dimension~~ moving a position of the subset in at least one direction without increasing the number of pixels in the subset;

(d) deriving a value for the optical density of the pixels in the ~~incremented~~ moved subset of the array; and

(e) repeating steps (c) and (d) to obtain derived values for the optical density for additional subsets of the image.

14. (Original) The method as defined in Claim 13, including the steps of

creating a look-up table for calibrating the scanned image to a standard, and

substituting the value in the look-up table for the derived values, wherein the standard is a neutral density optical calibrator.

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15. (Original) The method as defined in Claim 13, wherein the step of deriving includes taking the mathematical average of the gray level of the optical density of each pixel in the subset.

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16. (Original) The invention according to Claim 13, wherein the derived values correspond to a plurality of data points defining a curve.

17. (Original) The invention according to Claim 16, wherein the area under the curve is determined by integration.

18. (New) The method according to Claim 13, wherein the data has been scanned using a scanner selected from the group consisting of (a) flatbed scanners, (b) scanners where the data moves along a generally straight path, and (c) scanners where the data moves along a curved path.